

Natural Systems Flow and Water Temperature Characterization of the Upper Mokelumne River Watershed

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Public Comments

No public comments were received for this proposal.

Technical Synthesis Panel Review

Proposal Title

#0138: Natural Systems Flow and Water Temperature Characterization of the Upper Mokelumne River Watershed

Final Panel Rating
inadequate

Technical Synthesis Panel (Primary) Review

TSP Primary Reviewer's Evaluation Summary And Rating:

The authors are proposing a a three year data collection effort to characterize flow and temperature at a cost of about \$1.1M. Although the information to be collected may be useful for assessing conditions in the watershed, and ultimately informing management decision, the proposal is generally inadequate because the hypotheses that are being tested are either entirely missing or very unclear, the descriptions of how the data will be analyzed unclear, and the products from the work are not clearly described. The proposal is not complete, and it contains numerous comments/questions from co-authors that do not appear to have been addressed.

Additional Comments:

The authors are proposing a a three year data collection effort to characterize flow and temperature at a cost of about \$1.1M. Although the information to be collected may be useful for assessing conditions in the watershed, and ultimately informing management decision, the proposal is generally inadequate because the hypotheses that are being tested are either entirely missing or very unclear, the descriptions of how the data will be analyzed unclear, and the products from

#0138: Natural Systems Flow and Water Temperature Characterization of the Upp...

Technical Synthesis Panel Review

the work are not clearly described. The proposal is not complete, and it contains numerous comments/questions from co-authors that do not appear to have been addressed.

Technical Synthesis Panel (Discussion) Review

TSP Observations, Findings And Recommendations:

The proposal documentation is extremely limited -- the applicants propose extensive monitoring activities but provide little or no information about how they will use the data to be collected to address specific research questions. The proposal appears to be incomplete - editorial comments of the collaborators have not been removed from the proposal text (or addressed in the text.)

Technical Review #1

proposal title: Natural Systems Flow and Water Temperature Characterization of the Upper Mokelumne River Watershed

Review Form

Goals

Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the idea timely and important?

Comments	The goals for: Natural systems flow and water temperature characterization of the Upper Mokelumne River Watershed - are not as clear as they could be. I believe though that they are two fold: the researchers want to monitor water quality and temperature in this watershed and then they wish to use the data they gather to help understand future changes and how best to manage these changes. The idea is very timely and important. Monitoring flow and temperature across elevational gradients is important. However, this proposal lacks clearly stated questions and hyptoheses.
Rating	fair

Justification

Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

Comments	Understanding flow regimes, water quality, and temperature throughout an entire watershed over elevation gradients is worthy of study. I am not convinced that the data gathered here will really help managers better prepare for the future - this proposal is missing the link between data and management.
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Technical Review #1

	Gathering data is not enough - we need to know how these researchers will help make it applicable to a wider audience. There has been and continues to be some monitoring of water quality in the watershed (i.e. PG, USFS, etc.) - so there is clearly interest in the well being of the watershed. Which means the groundwork has been done - but again the connection between data and future management strategies needs to be out lined.
Rating	good

Approach

Is the approach well designed and appropriate for meeting the objectives of the project? Is the approach feasible? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches? Will the information ultimately be useful to decision makers?

Comments	The authors have designated three years to characeterizing the flow and tempeature in the Upper Mokelumne River watershed. They will monitor stream flow, air and water temperature, and other basic water parameters throughout the watershed. There is some confusion on how these sites will be monitored. The authors state that "data collection will take place over a seven month period m beginning in April in the lower elevations and May at the highest elevations -extending into October." The sites will be visited three times and water quality and flow measurements will be taken at this time. It this enough? Any thought to monitoring snow pack? If the authors' are convinced that this time period (April - October) is enough they need to explain this strategy. More importantly - I don't think that measuring flow regimes at each site three times throughout the study is enough. River flow is very variable (there is lots of literature on this)- and three times will not be enough to characterize the flow regime. How about storm flows? Are they important? Nutrients and bacteria can spike during storm flow and often
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Technical Review #1

	hydrological pathways change drastically during storms and over seasons. It might be better to choose a few sites and really characterize their flow well instead of grabbing flow data at many sites. It would also be nice to see a map of the watershed and of the sampling sites.
Rating	fair

Feasibility

Is the approach fully documented and technically feasible? What is the likelihood of success?
Is the scale of the project consistent with the objectives and within the grasp of authors?

Comments	This project is fully feasible. However, there is some concern on the overall organization of this project. The proposal does not seem to be finished - there are, I believe, internal "notes" - that have not been removed and there are no figures - i.e.- a map would be great. The goals of the study seemed scattered and overally the proposal is not clear and concise. However, the interesting science that could arise from this proposal is clear. It is dissappointing that the proposal is not a more finished product.
Rating	good

Monitoring

If applicable, is monitoring appropriately designed (pre-post comparisons; treatment-control comparisons)? Are there plans to interpret monitoring data or otherwise develop information?

Comments	There is no discussion, that I saw, of how this monitoring data will be used to help managers make good decisions. The monitoring that they propose is feasible and could generate lots of useful information. However, there is no discussion of how the data will be analyzed or how it will be made available to others.
Rating	

Technical Review #1

	fair
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Products

Are products of value likely from the project? Are contributions to larger data management systems relevant and considered? Are interpretive (or interpretable) outcomes likely from the project?

Comments	As stated previously the data collected here could provide useful insites - however, the authors have not attempted to make this clear. They offer no end product - except that they will have collected lots of data.....there are statements that hint at products: The Study will examine the oppurtunity to "manage" cold water resereves in storage facilities more effectively indicating when the best times to use of protect water may occur. - however, there is no explanation on how this will happen. It is not clear to me how the data they gather will help make the above happen
Rating	fair

Additional Comments

Comments	none.
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Capabilities

What is the track record of authors in terms of past performance? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Comments	The authors' resumes are more than adequate.
Rating	very good

Technical Review #1

Budget

Is the budget reasonable and adequate for the work proposed?

Comments	The budget is not unreasonable. And in the description there is money budgeted to data collection, analysis, and dissemination. But, this is the first time I have read that.... it would be more convincing if data management was thoughtfully discussed throughout in the text.
Rating	good

Overall

Provide a brief explanation of your summary rating.

Comments	This proposal must not have been completed upon submittal because of the authors' notes that imbedded throughout the text and because there are no figures, etc. The proposal has scientific merit. However, the lack of organization and the lack of clearly stated goals and products is worrisome.
Rating	fair

Technical Review #2

proposal title: Natural Systems Flow and Water Temperature Characterization of the Upper Mokelumne River Watershed

Review Form

Goals

Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the idea timely and important?

Comments	This is a three year project to characterize flow and temperasture conditions of upper Mokelumne watershed, plus meteorological conditions, assessment tools, communication etc etc The information may be important, but I did not see justification of its importance. This reads like a generic proposal, into which one cvould substitute the name of any watershed in California
Rating	poor

Justification

Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

Comments	no
Rating	poor

Approach

Is the approach well designed and appropriate for meeting the objectives of the project? Is the approach feasible? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches? Will the information ultimately be

#0138: Natural Systems Flow and Water Temperature Characterization of the Upp...

Technical Review #2

useful to decision makers?

Comments	yes. the monitoring approach appears reasonable
Rating	very good

Feasibility

Is the approach fully documented and technically feasible? What is the likelihood of success?
Is the scale of the project consistent with the objectives and within the grasp of authors?

Comments	yes. straightforward and routine work
Rating	very good

Monitoring

If applicable, is monitoring appropriately designed (pre–post comparisons; treatment–control comparisons)? Are there plans to interpret monitoring data or otherwise develop information?

Comments	this is all monitoring, with no experiment. the design was never elucidated.
Rating	poor

Products

Are products of value likely from the project? Are contributions to larger data management systems relevant and considered? Are interpretive (or interpretable) outcomes likely from the project?

Comments	the data should be of value. there is insufficient information to evaluate how and to what extent.
Rating	fair

Technical Review #2

Additional Comments

Comments	proposal clearly was rushed and incomplete, and was submitted with co-PI dialogue and queries still included.
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Capabilities

What is the track record of authors in terms of past performance? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Comments	no reason to doubt their competence to do the flow and temperature monitoring. no reason to be confident that these data are particulalrly needed or will be used in a particular way.
Rating	fair

Budget

Is the budget reasonable and adequate for the work proposed?

Comments	a million dollars !!! definitely not justified by proposal
Rating	poor

Overall

Provide a brief explanation of your summary rating.

Comments	no conceptual framework, no clear indication of need for/value of work, poorly done proposal, too much money
Rating	poor

Technical Review #3

proposal title: Natural Systems Flow and Water Temperature Characterization of the Upper Mokelumne River Watershed

Review Form

Goals

Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the idea timely and important?

Comments	No. See overall comments below. This proposal was never completed. It lacks figures, tables, and references. Portions of the text are missing. It includes notes to the co-authors with questions and considerations for completing this proposal. The proposal could not be evaluated in this form.
Rating	poor

Justification

Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

Comments	Yes. The proposal does use existing knowledge of flow and temperature controls on stream biota to justify research into longitudinal and temporal variations in stream biota with respect to these controls. However, the proposal is incomplete, and references are not cited.
Rating	poor

Technical Review #3

Approach

Is the approach well designed and appropriate for meeting the objectives of the project? Is the approach feasible? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology, or approaches? Will the information ultimately be useful to decision makers?

Comments	Indeterminate.
Rating	poor

Feasibility

Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives and within the grasp of authors?

Comments	Indeterminate.
Rating	poor

Monitoring

If applicable, is monitoring appropriately designed (pre–post comparisons; treatment–control comparisons)? Are there plans to interpret monitoring data or otherwise develop information?

Comments	Indeterminate
Rating	poor

Products

Are products of value likely from the project? Are contributions to larger data management systems relevant and considered? Are interpretive (or interpretable) outcomes likely from the project?

Comments	Not at this point
Rating	poor

Additional Comments

Comments

Capabilities

What is the track record of authors in terms of past performance? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Comments	Authors apparently have skills and background related to the proposed work.
Rating	fair

Budget

Is the budget reasonable and adequate for the work proposed?

Comments	Indeterminate.
Rating	poor

Overall

Provide a brief explanation of your summary rating.

Comments	It is obvious the authors did not have time to finish this proposal. It is far from complete and cannot be evaluated in its current form. Text is missing, and there are no figures, tables, or references. The underlying ideas are interesting, and the authors may be able to produce a good proposal next year. The proposal is so incomplete that it shouldn't have been sent out for review.
Rating	poor

